WHAT IS CLAIMED IS:

1. A channel optimization system for use with a communications channel, comprising:

an assorter configured to receive first and second signals having disparate transmission characteristics and select one of said first and second signals; and

a translator, coupled to said assorter, configured to encode said selected one of said first and second signals into a symbol representation as a function of a transmission characteristic associated therewith.

2. The channel optimization system as recited in Claim 1 wherein said assorter, comprises:

a parsing subsystem configured to extract control information associated with said first and second signals; and

a selector, coupled to said parsing subsystem, configured to select one of said first and second signals in accordance with said control information.

3. The channel optimization system as recited in Claim 1 wherein said translator, comprises:

a map table evoker configured to determine a conversion table to employ with said selected one of said first and second signals; and

a converter, coupled to said map table evoker, configured to encode said one of said first and second signals into said symbol representation.

4. The channel optimization system as recited in Claim 1 wherein said first signal is a voice signal and said second signal is a data signal.

5. The channel optimization system as recited in Claim 1 wherein said channel optimization system is embodied in at least one of a transmitter and a receiver associated with a telecommunications network associated with said communications channel.

6. The channel optimization system as recited in Claim 1 wherein said channel optimization system is at least partially embodied in a sequence of operating instructions operable on a processor.

7. The channel optimization system as recited in Claim 1 wherein said communications channel has a frequency dependent channel capacity and said first and second signals have different bit error rate transmission characteristics, said translator configured to encode said selected one of said first and second signals into said symbol representation as a function of said bit error rate transmission characteristics and said channel capacity.

8. A method for use with a communications channel, comprising:

receiving first and second signals having disparate transmission characteristics;

selecting one of said first and second signals; and

encoding said selected one of said first and second signals into a symbol representation as a function of a transmission characteristic associated therewith.

9. The method as recited in Claim 8 further comprising extracting control information associated with said first and second signals, said selecting said one of said first and second signals being in accordance with said control information.

10. The method as recited in Claim 8 wherein said encoding further comprises determining a conversion table to employ when encoding said selected one of said first and second signals.

11. The method as recited in Claim 8 wherein said first signal is a voice signal and said second signal is a data signal.

12. The method as recited in Claim 8 wherein said method is performed in at least one of a transmitter and a receiver associated with a telecommunications network associated with said communications channel.

13. The method as recited in Claim 8 wherein said method is at least partially embodied in a sequence of operating instructions operable on a processor.

14. The method as recited in Claim 8 wherein said communications channel has a frequency dependent channel capacity and said first and second signals have different bit error rate transmission characteristics, said encoding said selected one of said first and second signals into said symbol representation being a function of said bit error rate transmission characteristics and said channel capacity.

15. A channel optimization system for use with a communications channel, comprising:

an assorter means that receives first and second signals having disparate transmission characteristics and selects one of said first and second signals; and

a translator means, coupled to said assorter means, that encodes said selected one of said first and second signals into a symbol representation as a function of a transmission characteristic associated therewith.

16. The channel optimization system as recited in Claim 15 wherein said assorter means, comprises:

a parsing subsystem means that extracts control information associated with said first and second signals; and

a selector means, coupled to said parsing subsystem means, that selects one of said first and second signals in accordance with said control information.

17. The channel optimization system as recited in Claim 15 wherein said translator means, comprises:

a map table evoker means that determines a conversion table to employ with said selected one of said first and second signals; and

a converter means, coupled to said map table evoker means, that encodes said one of said first and second signals into said symbol representation.

18. The channel optimization system as recited in Claim 15 wherein said first signal is a voice signal and said second signal is a data signal.

19. The channel optimization system as recited in Claim 15 wherein said channel optimization system is embodied in at least one of a transmitter and a receiver associated with a telecommunications network associated with said communications channel.

20. The channel optimization system as recited in Claim 15 wherein said channel optimization system is at least partially embodied in a sequence of operating instructions operable on a processor.

21. The channel optimization system as recited in Claim 15 wherein said communications channel has a frequency dependent channel capacity and said first and second signals have different bit error rate transmission characteristics, said translator means encoding said selected one of said first and second signals into said symbol representation as a function of said bit error rate transmission characteristics and said channel capacity.

22. A transmitter for use with a communications channel of a telecommunications network that transmits first and second signals having disparate transmission characteristics, comprising:

a bit merge and framer subsystem that merges said first and second signals into a bit stream;

a bit-to-symbol mapping subsystem, coupled to said bit merge and framer subsystem, including:

an assorter that receives first and second signals and selects one of said first and second signals, and

a translator, coupled to said assorter, that encodes said selected one of said first and second signals into a symbol representation as a function of a transmission characteristic associated therewith; and

a modulator, coupled to said bit-to-symbol mapping subsystem, that modulates said symbol representation for insertion on to said communications channel.

23. The transmitter as recited in Claim 22 wherein said assorter, comprises:

a parsing subsystem that extracts control information associated with said first and second signals; and

a selector, coupled to said parsing subsystem, that selects one of said first and second signals in accordance with said control information.

24. The transmitter as recited in Claim 22 wherein said translator, comprises:

a map table evoker that determines a conversion table to employ with said selected one of said first and second signals; and

a converter, coupled to said map table evoker, that encodes said one of said first and second signals into said symbol representation.

25. The transmitter as recited in Claim 22 wherein said first signal is a voice signal and said second signal is a data signal.

26. The transmitter as recited in Claim 22 wherein said channel optimization system is embodied in at least one of a transmitter and a receiver associated with said telecommunications network.

27. The transmitter as recited in Claim 22 wherein said channel optimization system is at least partially embodied in a sequence of operating instructions operable on a processor.

28. The transmitter as recited in Claim 22 wherein said communications channel has a frequency dependent channel capacity and said first and second signals have different bit error rate transmission characteristics, said translator encoding said selected one of said first and second signals into said symbol representation as a function of said bit error rate transmission characteristics and said channel capacity.